

ABSTRACT

The invention provides an exhaust gas purification device that can prevent deterioration of the emission during a regeneration process for a particular filter for trapping particulates contained in the exhaust gas.

Particulate filter regeneration timing determining unit estimates the amount of particulates trapped by the particulate filter to determine the filter regeneration timing based on the estimated particular amount. In response to the regeneration timing determination, heating unit heats the particulate filter to raise an exhaust gas temperature, so that a particulate filter regeneration process starts. At this time, intake air amount reducing unit reduces the intake air amount to raise the exhaust gas temperature while combustion maintaining unit controls the combustion in the internal combustion engine so as to be maintained in a desired condition.

(Figure 1)